Thomas A. Loudat, Ph.D.

46-281 Auna Street

Economist Kaneohe, Hawaii

January 12, 2007

Ian Mattoch Law Offices of Ian Mattoch Pacific Guardian Center Suite 1835 737 Bishop Street Honolulu, Hawaii 96813

Re: responses to the 12/6/06 the Dr. Jerry Udinsky report in the Laughlin case

Dear Mr. Mattoch,

Per your request I am providing response comments to the 12/6/06 report of Dr. Jerry Udinsky. These comments are organized into two sections. The first section comments on the loss estimation approach utilized by Dr. Udinsky for his analysis. The second section provides response comments to Dr. Udinsky's criticisms of my 9/26/06 report loss estimation.

Dr. Udinsky Loss Estimation Approach

My comments follow the respective tables supporting Dr. Udinsky's analysis.

Tables' 4A-6B

Dr. Udinsky's Table 4A-6B provides an Earnings History for James Laughlin and Dr. Udinsky's note death projections. This earnings history is also summarized on page 3 of my report and earnings projections are presented on page 8. Plotting actual and our respective earnings projection data one can observe the following.

Figure 1: James Laughlin Pre-Death Earnings And Projections

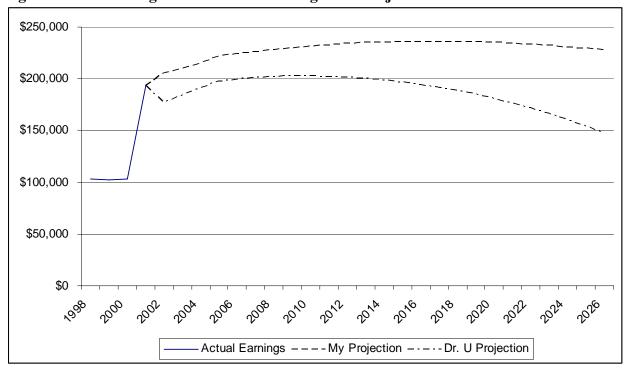


Figure 2: Age-Earnings Profile for a Male with a Masters Degree (mean & 90^{th} percentile profiles)

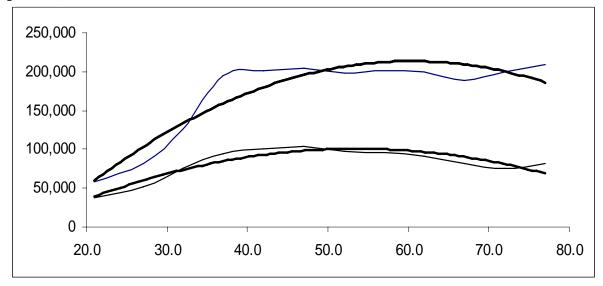


Figure Observations

Figures 1 and 2 observations are the following.

- 1. Mr. Laughlin's earnings suggested he was not an average earner for a male with his characteristics at the time of his death. Average earnings for a male with his characteristics according to Fig. 2 at his age the year before his death equals roughly \$96,000. Mr. Laughlin's actual earnings in the year before his death (2001) equaled \$213,000 (2005\$). The 90th percentile age earnings profile for a male with a Masters degree at Mr. Laughlin's age the year previous to his death equals \$198,000. This is close enough to Mr. Laughlin's earnings to suggest that this earnings profile is appropriate for Mr. Laughlin.
- 2. The average annual rate of increase of Mr. Laughlin's earnings from 1998-2001 was 23% per year
- 3. The age-earnings profile for the 90th percentile male earner with a Masters degree shows earnings significant earnings increases for a male with a Masters degree over the age-earnings categories leading up to Mr. Laughlin's category at the time of his death.
- 4. The (90th percentile) age-earnings profile suggests Mr. Laughlin earnings increases through age 60.

Dr. Udinsky Use of Tables 4A-6B Data

Dr. Udinsky uses his Table and 3 data to do the following.

- 1. To estimate Mr. Laughlin's "Annual Earning Capacity" in his Tables 4A-6B.
- 2. To inflate the earnings amount of Table 3 to \$2002 values. Dr. Udinsky then takes the simple mean of these values increasing the earnings portion by a 17.2% "fringe benefit" value to come up with his estimated "annual earnings capacity" level at the time of Mr. Laughlin's death.
- 3. Dr. Udinsky uses an age-earnings profile for the average male with a Masters degree to project Mr. Laughlin's earnings forward in time.

Issues with Udinsky's Approach

Issues I have with Dr. Udinsky's methodology are the following.

- 1. It ignores all the information available related to Mr. Laughlin's earnings. This includes his earnings level the year previous to his death and his earnings increases previous to his death.
- 2. Mr. Udinsky's approach ignores statistical information relevant for Mr. Laughlin earnings projections. Specifically earnings profiles for males with all of Mr. Laughlin's characteristics (see Figure 2 above) indicate earnings increases continuing to age 60. In my report I continued earnings increases per the age-earnings cycle to age 56 per the earnings profile presented on p. 11 of my report.
 - a. Dr. Udinsky commences earnings reductions at age 47, which is totally inconsistent with appropriate profiles for Mr. Laughlin.
 - b. Figure 2 data for the age-earnings profile is the most specific for Mr. Laughlin as it is specific to his race, educational level and earnings percentile at the time of his death. It is also the most recent data available (i.e. 2005).
 - c. The age-earnings data on page 11 of my report is for 2003.
 - d. Dr. Udinsky's source is dated relative to data available as it is 2001 data (see Tables 5 footnote 3 and & 6A Footnote 3).

- e. The age-earnings profile used by Dr. Udinsky is that for the total male population with a Masters degree. The data source Dr. Udinsky cites does provide data specific to all of an individual's characteristics (e.g. ethnicity, educational level,
- 3. Benchmark statistical information indicates that Mr. Laughlin was not an average earnings performer for a male with his characteristics. His earnings the year before his death were approximately equal to what would be expected for a 90th percentile male earner with his characteristics. Dr. Udinsky ignored this fact.
- 4. Dr. Udinsky ignores information provided by Mrs. Laughlin suggestive of earnings equivalent to my projections (see p. 2 of my report). Most significantly related to earnings projections are her statements that:
 - a. 2002 at a been better than 2001
 - b. (Mr. Laughlin) had gotten a raise and was in process of building a house
 - c. the appreciation showed by his company suggestive of an outstanding performer for which in the US economy one is rewarded.

Conclusion

If it is appropriate to ignore case specific information and benchmark statistical information useful in projecting an individual's earnings then Dr. Udinsky's estimate would have some credibility. If it is not appropriate to do so, then his earnings estimate and any losses derived therefrom have no usefulness relative to the estimation issue of this case. It would be my opinion that relative to professional standards it is appropriate to consider and utilize the case specific and benchmark statistical information as I have done in my analysis.

Tables 5 and 6 – One-Person's Own Consumption of Household Income

For estimating Mr. Laughlin's personal consumption Dr. Udinsky relies on a Bureau of Labor Statistics publication entitled Revised Equivalency Scales (see footnotes 7 and 6 of Tables 5 and 6, respectively).

Comments

My comments related to Dr. Udinsky's Tables 5 and 6 are as follows.

- 1. It is uncertain from his citation and other information presented in Dr. Udinsky's report how the entitled Revised Equivalency Scales information is used to derive Mr. Laughlin's own-consumption level of 26.82% of total family income until Chloe reaches age 18 and 44.9% thereafter. The derivation of this percentage is not noted in his report.
- 2. The Bureau of Labor Statistics published a Revised Equivalent Scale as Bulletin No. 1570-2 in November 1968. More recently the Bureau of Labor Statistics published bulletin 1865 (table 154) which was published in 1975. Either of these data sets would seem dated for determination of one-person's personal consumption of total family income in 2006 especially considering that more recent, definitive sources for estimation of this value exist.
- 3. Gerald D. Martin, Ph.D. published *Determining Economic Damages*. This publication presents methodologies and data utilized by the profession of forensic economists for loss estimation. It is updated annually. I represent that this publication is definitive and well

Page 5 of 13

accepted and used by the profession. I present information from this publication to establish professional standards and practices for the estimation of one-person's consumption of total household income.

- a. In section 520 Dr. Martin "Combines the Various Studies" he reviewed and estimates one-person's consumption of total household income when there is one child as 23.9%, and 31% when there are no children. There is no determination in this table of the impact of household income level on one-person's consumption from this income.
- b. Finally, Dr. Martin factors into an analysis family income because "it is readily apparent that as family income levels increase, the indivisible portion increases as a percent of the total" which directly translates into lower estimates of oneperson's consumption of total household income.
- In Table 22D (2002) Dr. Martin estimates "male consumption as percentage of income" for a household with gross income greater than \$70,000 equal to 14.7 % for a one-child household and 17.3% for a household with no children. The Laughlin's household income level at the time of Mr. Laughlin's death would place them in this income category.
- The percentage consumption factor calculated by Dr. Martin using a more recent, compete data set than used by Dr. Udinsky and factoring into the calculations household income is approximately one half of the 26.82% own-consumption level utilized by Dr. Udinsky until Chloe reaches age 18 and 39% of the level Mr. Udinsky uses after she is assumed to leave the household.
- 4. The Journal of Forensic Economics, a refereed Journal, published the "Patton-Nelson Personal Tables 2000-01: Updated and Revised" in Fall 2002 (JFE, Volume XV, Number 9).
 - That these tables are published in a refereed Journal specific to forensic economist suggests a significant level of validity and credibility to this study. I used the results of this study to estimate Mr. Laughlin's (one-person's) consumption of his family's total income.
 - b. Mr. Laughlin's average consumption rate from my analysis is 10.1%. Lower percentages than reported above are consistent with the higher levels of family income estimated in my analysis than used to estimate these benchmark rates.
- 5. Dr. Udinsky assumes the Laughlin's would have supported their daughter Chloe through age 18.
 - a. Dr. Udinsky ignores case specific information related to this particular estimation variable.
 - b. Regina Laughlin indicated that she and Mr. Laughlin "would have supported (Chloe) through college, absolutely... both had extended education and would have expected to do the same for Chloe" (see my report page 2).
 - I used an assumed support through age 21 which is conservative relative to the completion of even a four-year college degree.

Conclusion

In the context of all the case-specific information, professional standards, the significant amount of (recent) data and information provided by the profession, and even his own estimated Mr. Laughlin income levels, Dr. Udinsky estimates a Mr. Laughlin personal consumption percentage of total family income that is he reviewed overstated. In the context of professional practices, it would seem fair and reasonable to conclude that a forensic economist relying on the information and data provided by the profession and the case-specific facts would estimate personal consumption percentages more similar to those estimated in my analysis.

Tables 7 and 8 – Value of Lost Household Services

Professional Estimation Practices and Standards

Gerald Martin's forensic economics compendium of approaches and data used by the profession systematically lays out the approach that I represent is used by the majority of forensic economics professionals. Referring to his Chapter 6 these steps are as follows.

- 1. Services performed in the home for the house and family have a dollar value. These services can be measured in one of two ways. The opportunity cost approach and the market replacement cost approach. The latter approach is more often used by the profession wherein the value of services are measured by determining what it would cost to hire an outsider to perform all the household services.
- 2. The forensic economist must make some general estimate of the time consumed in each job, and then to price that job if it were to be hired out.
- 3. Measuring the Amount of Services Lost
 - a. In a death case, all services are lost.
 - b. Begin by considering, or asking the family members to consider whether the services formerly performed were, in their opinion, what would be performed in an average family. Granted, this is an estimate on the part of the family, but it is better than a guess, or an arbitrary value assigned by the economist and it gives your economist a basis for his estimate.
 - c. Ask the family About Unusual Services such as a husband who may be a carpenter, plumber, or electrician who can make or repair things around the home than the average husband would have to pay to have done. In cases such as these, it seems justifiable to assume that the value of the services by the skilled member is greater than the average and a claim for a higher loss to the family can be made.
- 4. Historic Sources/Measures of hours of household services.

Hours per Week Spent in Household Work

Researchers	Husband	Wife
Sanik	13.00	43.00
Bryant	12.75	34.85
Sanik	14.16	41.12
Hunt/Kiker	10.86	44.46
Peskin	15.12	33.77
Walker	11.20	51.10
Sanik	11.90	47.60
Gauger	10.50	39.90
Average	12.40	41.52

- b. Dr. Martin discusses other more recent studies in his compendium. No where in his book does Dr. Martin mention the source used by Dr. Udinsky.
- 5. **The Dollar Value of a Day study** (used in my analysis)
 - a. Economists John Ward and Kurt Krueger, through their work as economic demographers at the firm ExpectancyData have combined **data collected from** two highly regarded sources into a study titled The Dollar Value of a Day
 - i. The Environmental Protection Agency (EPA) study called the National Human Activity Pattern Survey which collected data on the time spent by 9,386 person's ages 0 to 94 in each of the 50 states and over all seven days of the week by using what surveyors call a time-diary study. From these detailed diaries, ExpectancyData has been able to isolate the time spent on household activities in hours per day in 23 categories.
 - ii. In the fall of 2004, a new study called the American Time Use Survey (ATUS) was released by the Department of Labor. The survey was conducted by the Census Bureau and sponsored by the Department of **Labor**. This is planned to be an ongoing and regularly updated study that seems to be superior to any of the studies mentioned above. Accordingly, Expectancy Data prepared a new version of Dollar Value of a Day that based on the ATUS data.
 - iii. ATUS Data Quality: "NONRESPONSE IN THE AMERICAN TIME USE SURVEY: WHO IS MISSING FROM THE DATA AND HOW MUCH DOES IT MATTER?," KATHARINE G. ABRAHAM, AARON MAITLAND, SUZANNE M. BIANCHI Abstract This article examines nonresponse in a large government survey, the American Time Use Survey (ATUS), which interviews persons in households previously interviewed in the Current Population Survey. The response rate for the ATUS has been below 60 percent for the first two years of its existence, raising questions about whether the results can be generalized to the target population. The article begins with an analysis of the types of nonresponse encountered in the ATUS. Noncontact accounts for roughly 60 percent of ATUS nonresponse. with refusals accounting for roughly 40 percent. We find little support for the hypothesis that busy people are less likely to respond to the ATUS but find considerable support for the hypothesis that people who are weakly integrated into their communities are less likely to respond, mostly because they are less likely to be contacted. When we compare aggregate estimates of time use calculated using the ATUS base weights without any adjustment for nonresponse, estimates calculated using the ATUS final weights with a nonresponse adjustment, and estimates calculated using weights that incorporate our own nonresponse adjustment based on a propensity model, we find some modest differences, but the three sets of estimates are broadly similar. The article ends with suggestions for further research and analysis
 - b. Doctors Ward and Krueger have not created something new from the data. Rather, they have taken the original data and converted it into a format that is far more user friendly for the economist, attorneys, and jurors than is the formal study found on the Internet.
 - c. (My Comment based on the Study) The Dollar Value of a Day values household service hours is based on wage data collected by the Bureau of Labor Statistics.

Table valuations use national average wages which can be adjusted to specific states using a "regional wage adjustment table." The suggested adjustment for Chicago, Illinois is 109.7. This suggests that the valuation done in my report is low as I used a simple national average unadjusted for higher wage rates in Chicago.

- 6. Self-consumption of household services
 - a. Consumption percentage
 - i. In the Journal of Forensic Economics, Vol. 6, no. 2, authors Robert Trout and Carroll Foster published a paper titled "Estimating a Decedent's Consumption in Wrongful Death Cases." After reviewing issues and approaches which do not lead to any definitive approach, Trout and Foster state that their practice is to "simply use the same proportion for income deductions and apply it to family uncompensated household services, since no better benchmark seems to exist." This would put the range of deduction within 20 to 40%.
 - b. Household services total to deduct one's own-consumption from
 - i. At a National Association of Forensic Meeting (NAFE) meeting economists were asked to calculate the household service value for a deceased wife. None of them made a deduction from the husband's value.
 - ii. While this is not a scientific sampling of the methodology to which economist in general subscribe, it is at least an indication that, at present, the deduction (i.e. consumption percentage) should be made only from the value of the decedent's services.

Dr. Udinsky's Approach and Comments

In marked contrast to what I will characterize as a "standard of the profession" approach just outlined is Dr. Udinsky's approach to measuring the lost value of Mr. Laughlin's services due to his death.

- 1. In Tables 7 and 8 Dr. Udinsky estimates lost household services "multiplier" based on 1hour per week.
 - a. I have never seen this approach used by an economist in the 23 years I have practiced forensic economics.
 - b. 1-hour per week as a measure of one's household service contribution does not comport with any published, objective measure of the level of these services.
- 2. Dr. Udinsky valued household services based on the wage rate for "Janitors Wages"
 - a. As any of a multiple of studies available not the least of which is the Dollar Value of a Day study discussed above and used in my analysis, no where have I seen a singled wage rate used to value household service hours.
 - b. Household services fall into a myriad of different labor market categories including: housework, cooking, gardening, household management, shopping, childcare, etc., as documented in numerous household service studies. This minimally suggests valuing the service hours for these respective categories by their labor market equivalents as done in the Dollar Value of a Day study.

- 3. Dr. Udinsky asserts that the finder of fact "may determine that Mr. Laughlin would have contributed more or less than one hour per week of services, after deducting for the services provided by Mrs. Laughlin to Mr. Laughlin."
 - a. It appears that Dr. Udinsky lacks the expertise to cite a definitive study and/or rely on representations of surviving family to opine to a level of household services that Mr. Laughlin could reasonably have been expected to provide had he not died. He sits in marked contrast to the other forensic economists who opine to this measure relaying on definitive information and practices readily available to forensic economists including information provided by a decedent's surviving family. .
 - b. I am uncertain what expertise Dr. Udinsky perceives the triers of fact possess to make the determination of Mr. Laughlin's household service level had he not died. Based on the "standards of the profession" information presented above, it is clear that this determination, calculation and/or estimation fall within the expertise of all forensic economists except apparently Dr. Udinsky.
- 4. Dr. Udinsky uses the Revised Equivalence Scales" in his estimation of the "Personal Consumption."
 - a. It is unclear how and why he used this source for this determination based on the information presented in his report.
 - b. Dr. Udinsky's estimated Mr. Laughlin "Personal Consumption" percentage of Mr. Laughlin's services as well as his approach do not comport with the current standards and/or practices of the profession outlined above.
- 5. Dr. Udinsky discounts future values of Mr. Laughlin's household services using a 3% net discount rate.
 - a. It is uncertain how Dr. Udinsky determined this rate as well as the 1% after-tax net discount rate used to discount future earnings based on the information presented in his report.
 - b. A 3% net discount rate is more than 2 times greater than the average net discount rate used by profession (1.35%) measured in the 2006 survey of forensic economists. The higher the net discount rate the lower is the present value amount.
 - The net discount rate should be an after-tax net discount rate since interest earnings on any award to replace lost household services are taxable. Accounting for this tax effect would increase the present value amount.

Conclusion

Dr. Udinsky exhibits an utter disregard or ignorance of the methods, practices and data sources of the profession. Further, he abrogates his responsibilities as a forensic economist to provide data we as a profession commonly rely on to assist the triers of fact make loss determinations. The end result is an unequivocally biased opinion of the value of Mr. Laughlin's household services lost to his surviving family due to his death.

Dr. Udinsky Critical Comments of My Report

Earnings Projections

I will present Dr. Udinsky's comment and immediately thereafter my response.

- 1. Dr. Loudat "did not take Mr. Laughlin's earnings history into consideration."
 - a. This is an entirely incorrect statement. I projected earnings based on:
 - i. The entire historic record of earnings plus net income available which showed a significant upward trend ignored by Dr. Udinsky.
 - ii. The age-earnings profile for a male of Dr. Laughlin's characteristics which supported my projections and not Dr. Udinsky's.
 - iii. Comments made by Mrs. Laughlin noted above.
 - iv. I absolutely did not project Mr. Laughlin's earnings "based on one year of data." The data provided in my original report as well as additional data provided in this report indicate my reliance not only on Mr. Laughlin's earnings and their inherent trend but on the broader context of what was going on with him professionally as indicated by his wife and the statistical data provided.
 - b. Mr. Laughlin's highest earnings level occurred the year previous to his death.
 - i. This is an incontrovertible fact.
 - ii. Would Dr. Udinsky use my historic earnings or his for that matter, to project earnings the first full year of work post-completing our respective doctorates. Dr. Udinsky seemingly would in spite of <u>all</u> factual information (i.e. a new PhD) as he ignored the Mr. Laughlin specific information presented in my report that would have relevance for future earnings projections (see 1.iv. immediately above).
 - iii. My understanding based on conversations with Mrs. Laughlin was that Mr. Laughlin "every year doing better and better... getting promoted being actively recruited by other companies" (see my report page 2).
 - iv. Mrs. Laughlin indicated that they "may have had another child is no accident" (see my report page 3).
 - v. Any analysis based on an assumed additional child with Mrs. Laughlin <u>not</u> working would result in higher losses than I estimated.
 - vi. It is my understanding that Hawaii law allows considering a likely family into wrongful death loss estimation.
- 2. Mr. Laughlin's earnings varied from year-to-year.
 - a. There is generally variation around the secular trend.
 - b. Mr. Laughlin's earnings increased by 73% from 2000 to 2001. Nowhere did I use an average annual growth rate of this magnitude.
 - c. Projections post-death for Mr. Laughlin were based on individual-specific earnings profiles that allowed projecting a long hike in terms secular trend ignoring discrete jumps of 73% such as occurred from 2000 2001.
- 3. Loudat's estimated annual earnings capacity "is significantly higher than Dr. Loudat's research on the compensation of either a Consultant 2 and a financial and analysis manager."
 - a. Dr. Udinsky fails to note that the profiles for a "financial analysis director" and/or a "chief financial officer" either approximate or exceed my estimated earnings capacity levels.
- 4. Retirement income based on hypothetical data
 - a. The percentage changes of income used in my analysis can hardly be called hypothetical.

- i. The data source used is the Bureau of Labor Statistics "Consumer Expenditure Survey" (CES) data. This data is definitive and widely used and cited by the profession of forensic economists. If Dr. Udinsky has an issue with this data source he should make this clear.
- ii. It is not hypothetical that families in the US retire and live off of income generated from private and public (i.e. social security) benefits. This provides the rational basis to model the retirement situation as well as the fact that employees receive retirement income benefits the value of which lost is not accounted for by a mere earnings projection.
- Retirement income for high income households of 97% of income preretirement is empirical fact as reported by the Bureau of Labor Statistics. It is also a fact that the Laughlin's would be classified as a "high income household."
- The CES data are used to estimate the Laughlin's retirement income in my analysis.
 - The value of the Laughlin's retirement income is estimated from the CES data in the same way that I use any published, secondary source, benchmark data in my analysis. This includes: life and worklife expectancies, earnings levels and profiles, benefits as a percentage of earnings and others.
 - By virtue of their employee status the Laughlin's would receive employer provided retirement income benefits including employer's contributions to social security, and private retirement benefits.
 - 1. Mrs. Laughlin indicated that Mr. Laughlin had a 401k plan to which his employer made contributions.
 - "There is no evidence that Mr. Laughlin's retirement income would be 66% or 43% of his income prior to retirement."
 - 1. There is case specific and general population information and data that Mr. Laughlin would have had retirement income from benefits provided by the employer as well as his own contributions. My analysis accounts for this value as costs to Mr. Laughlin for retirement income..
 - 2. Given case specific information available, it is only possible to value Mr. Laughlin's retirement income using secondary sources similar to what I used in my analysis.
- 5. Personal consumption rates
 - "Dr. Loudat's calculation of personal consumption is illogical and unreasonably low."
 - i. The benchmark, professional standards and practices information presented above unequivocally indicates that my approach to the estimation of the personal consumption rate and the rate itself comports with professional standards and practices. Dr. Udinsky's does not.
 - In the first paragraph of Dr. Udinsky's critical comments of my "personal consumption," he myopically suggests some limit to a personal consumption rate based on the "average personal savings rate." "Personal savings" would be one component of an estate loss. Other components of an estate loss would be non-monetary assets accumulated (not consumed)

over an individual's life. Additionally, a personal consumption rate would be lower to account for support from one's income for surviving family members and the support to the joint household shared with surviving

- b. "The Patton-Nelson study failed to consider consumption from saved earnings that occurs during retirement years."
 - i. This is an entirely incorrect statement. Data from the CES relied upon by Patton-Nelson for their study would include in the data set "retired" households as well as households during "working years."
 - The accounting from "saved earnings" is directly accounted for in my analysis. It quite surprises me that Dr. Udinsky did not notice this.
 - iii. If there was any validity to Dr. Udinsky's criticisms of the Patton-Nelson, refereed Journal article it seems reasonable to conclude they would have been published to forewarn forensic economists of their pitfall.
- "It is unreasonable and incorrect to assume that the same rates of consumption that existed during working years would apply during retirement."
 - i. In my analysis, the consumption rates during "retirement" equal 10.5% The consumption rate during working years equals 9.81%. The rates are low because of the high income levels of the Laughlin household. This fact directly repudiates Dr. Udinsky's comment.
 - ii. Unreasonable and incorrect assumptions of Dr. Udinsky's analysis are:
 - 1. To not estimate any retirement income when all case specific and empirical information indicates that it would have occurred but for Mr. Laughlin's death.
- 6. "Mrs. Laughlin was not employed outside the home... Mr. Laughlin may not have needed to perform as many household services as an "average" provider of household services in the study."
 - The household category that was used for my analysis is "married male that works full time, youngest child under age 13." The statistical categorization would seem appropriate for the Laughlin household.
 - b. Mrs. Laughlin's comments about the service mix and level of services provided by Mr. Laughlin previous to his death suggested he was an exceptional performer (see my report pages 6-7).
- 7. Dollar Value of a Day Study Critical Dr. Udinsky statements
 - The information and comments provided above completely and unequivocally repudiate Dr. Udinsky's critical comments.
 - b. My calculations of loss of household services are far from being "incorrect" as Dr. Udinsky asserts. Since my analysis relies on an accepted source using what I can fairly characterize as an approach accepted by the profession, my valuation can be fairly stated to be "correct." I would characterize them as fair and reasonable estimates of the value of Mr. Laughlin's household services lost his surviving family.
 - I could not characterize Dr. Udinsky's estimate of the value of Mr. Laughlin's household services lost his surviving family as "fair and reasonable."

Conclusion

I hold all opinions to a reasonable degree of economic certainty. I reserve the right to revise this report if new or un-reviewed information suggest such revisions are merited. If you have any questions please call. Aloha!

a Joulat

Sincerely,

Thomas A. Loudat, Ph.D.

(808) 235-0578

(808) 235-5161 (FAX)

Email: tomloud@earthlink.net